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ABSTRACT

This manual was developed to provide assistance to persons in registered apprenticeships and vocational education who wish to form a link between these two institutions. It offers a procedure that can be adapted to meet local conditions. The major sections of the manual define linkage, describe when linkage is likely to occur, list the possible benefits, enumerate the conditions that facilitate linkage, describe how to develop a linkage plan, provide suggestions on how to implement linkage plans, and describe an evaluation process. (This structure was selected for the manual so that those considering entering into a linkage agreement could establish what they deem are necessary ingredients for a linkage plan, as well as weigh the possible costs and benefits of entering into such an agreement, before making initial contacts with the agency with which linkage is proposed.) In addition, the manual provides assistance in making important first contacts so that the conditions that facilitate linkage can be maximized. Procedures for determination of the content of the linkage agreement and the development of the process to accomplish the activities also are provided. Finally, suggestions about how to carry out and evaluate the planned activities are provided. Sample forms for a linkage arrangement are offered in appendixes to the manual. (KC)



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LINKAGE BETWEEN VOCATIONALLY TRAINED PARTICIPANTS AND INDUSTRY REGISTERED APPRENTICESHIP PROGRAMS:

AN IMPLEMENTATION MANUAL

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Introduction

This manual was developed to provide assistance to persons in registered apprenticeship and vocational education who wish to form a linkage between these two agencies. The approach taken is to tell "what it is, and how to do it." The intent here is to provide at least one method by which linkages can be developed. It is not assumed that the suggested method is "the one and only." Rather, the method is offered as a suggested set of procedures that those involved can utilize—and from which they can deviate. It is assumed that having a set of procedures which can be adapted to the local situation will facilitate the development of linkage arrangements.

The major sections define what linkage is, describe when linkage is likely to occur, list the possible benefits, enumerate the conditions that facilitate linkage, describe how to develop a linkage plan, provide suggestions on how to implement linkage plans, and describe an evaluation process. This structure was selected for the manual so that those considering entering into a linkage agreement could establish what they deem are necessary ingredients of a linkage plan, as well as weigh the possible costs and benefits of entering into such an agreement, before making initial contacts with the agency with which linkage is proposed. In addition, the manual provides assistance in making those important first contacts so that the condition which facilitates linkage can be maximized. Procedures for determination of the content of the linkage agreement and the development of the process to accomplish the activities are also provided. Finally, suggestions on how to carry out and evaluate the planned activities is provided.



What is Linkage

Linkage in its simplest form could be any activity involving two or more agencies (organizations) that is conducted with the intention of contributing to the achievement of each agency's respective goals.

Thus, linkage can be thought of as an exchange from which those involved expect to benefit (Levine and White, 1960).

A more complex definition offered by Banathy & Duwe (1978) is that "linkage is a negotiated, authoritative arrangement between organizations whose internal components allow for a mutual coordination or exchange of resources of activities" that is "designed for the purpose of achieving each organization's, as well as mutually defined goals and objectives." This definition makes more explicit the idea that linkage is a conscious process that results from decisions to exchange activities. It is thus evident that some level of planning must be involved in any such exchange. Depending on the complexity of the exchange the "plan" may be written or oral.

Combining the above definitions, it may be seen that linkage should result in both meeting goals of the respective agencies as well as the mutually planned goal(s). For example, a linkage between vocational education and industry could have as its goal the awareness on the part of youth of the occupations within industry. A goal for this activity on the part of vocational educators would be to provide vocational guidance for students and thus more relevant education. The industry, on the other hand, may have as its goal the attraction of young workers or public relations for the industry. Thus, while there is a mutual goal for conducting the activity, there are also goals that are specific to



the respective agencies. This exchange satisfies the goal established for the linkage as well as the rather immediate need of the school personnel to provide a career development activity for selected students and long-range goals of the industry to attract workers and improve its image in the community. A linkage activity, while having a specified goal for the activity, need not satisfy the same need for the involved organizations. In fact, it is unlikely that organizations will share many mutual goals for such an exchange.

The types of linkage can be categorized as those that are mandated and those that are voluntary (Esterline, 1976). Mandated linkages can be further divided into those that are hierarchical (vertical), i.e., have a particular chain of command which is designed to coerce agencies into linkages; and horizontal, those in which the agencies have equal status but are required to link by their respective legislation. However, both are subject to audit. The Comprehensive Employment Training Act (CETA) and vocational education fall into the horizontal categorization. Since the nature of this type of linkage is usually the result of a plan, it is sometimes considered to be "managed" rather than mandated.

The second major type, voluntary linkage, is characterized by the absence of a prescribed system of management rules. Some would consider this to be "unmanaged" (Esterline, 1976). However, plans for activities will result in linkage by mutual adjustment, and the resulting consensus would avoid the haphazard state suggested by the term "unmanaged linkage." Registered apprenticeship linkage with vocational education is voluntary. No legislation exists at the present that requires these two agencies to conduct any activities that involve the other. Yet, linkage activities



can be observed that enable these agencies to meet their respective goals. Most notable is the provision of theoretical instruction for apprentices by instructors paid by vocational funds and delivered in vocational facilities. Such linkages are frequently administrative only and thus require little effort on the part of either of the involved agencies. That is, apprenticeship committees select the instructor; vocational education pays the instructor, supplies the facility, and collects the vocational education funding from credit generated by the teaching of the course, all of which may occur with little or no interaction between vocational education and apprenticeship personnel. The next section provides some guidelines as to when agencies are most likely to form linkages and attempts to show how these guidelines apply to the relationship between vocational education and apprenticeship programs.

When Linkages are Likely to Occur

If agencies could accomplish all of the goals that they set for themselves or are set for them by legislation, there would be little reason for linkages. Agencies by their very nature have certain needs, goals, methods of operation, and philosophies that lead to a tendency to be autonomous. Thus, the force that leads to voluntary linkage is the inability of the respective agencies to accomplish all of their goals independently. Such inability is the result of a lack of resources—both tangible and intangible (Esterline, 1976). Tangible resources include money, staff, and facilities while intangible resources include information and influence. It may be noted that the accomplishment of goals always requires resources. Resources are usually the most scarce when the involved agencies are attempting to utilize their scarce resources



to facilitate innovations. Frequently, these innovations are conducted in the face of budgetary cutbacks because of a need for the agency to justify its funding position with other competing agencies for the same state or federal dollar.

Where are the two agencies in regard to resources and innovation? It would appear that the two agencies to which this publication is targeted have too few resources to meet their stated goals. For example, vocational education has had as its long-time expectation and evaluation criterion the placement of completors in jobs for which they were trained. Decision makers have been unwilling to allocate scarce resources to placement activities. Rather, they have focused on the role that schools perform best--instruction. In the face of cutbacks in budgets the traditional criterion looms over vocational educators' heads with a great deal of threat coupled with the need to respond to the national call for a more productive work force. If a reduced budget is to be available and innovative efforts are to be turned toward productivity, this further reduces the likelihood of putting scarce resources into placement—unless the current innovation, productivity, can be focused on improved placement and continued instruction.

Registered apprenticeship personnel, on the other hand, are faced with the same budgetary situation and must thus justify the expense to the federal and state funding sources. This is compounded by the gradual decline (Glover, 1980) of registered apprenticeship. In addition, apprenticeship personnel have expressed the desire to expand into areas of apprenticeship which are non-traditional and to mandate apprenticeships for those who enter the areas for which registered apprenticeships have



been traditional. However, before getting too far into the development of linkages that may help to resolve these problems it may be desirable to consider the cost and benefits likely to occur from such a linkage. Costs and Benefits of Linkage

There are few commitments that can be made without certain costs or restraints that accompany the resulting benefits. The conduct of linkage activities between Registered Apprenticeship and Vocational Education is no exception. While there will be costs, the benefits are likely to outweigh them. In addition, the beginning of the conduct of linkage will require some change within the respective agencies. However, the termination of linkage activities should not leave residual costs. Rather, there may be residual benefits. For example, if the placement of vocational students results in expanding apprenticeship programs into an industry that had not previously utilized the apprenticeship system then it is likely that a portion of these industries would persist in utilizing the apprenticeship system of training.

The following is a list of some possible benefits and costs. It is not exhaustive, thus the reader may wish to add to the lists.

Possible benefits

- 1. Expansion of the clientele to whom service is provided.
- Reduction of cost for delivering the service.
- Increasing the probability of the agencies achieving their respective goals.
- 4. Reduction of mistrust between agencies.
- Establishment of mutually understood and respected agency functions.
- Awareness and appreciation of the strategies, problems and issues encountered by each agency in delivering service.



Possible costs

- 1. Autonomy may be reduced to the degree that agencies are dependent on the other to perform certain activities.
- 2. The initial costs of linking in terms of additional staff time for planning and coordination.
- 3. Possible loss of "trade secrets".
- 4. The exposure of agency deficiencies that the respective agencies would rather keep to themselves.

The costs listed here and others of which the reader is aware may provide a deterrent to the agencies forming linkage. However, if the environment is (or can be made to be) conducive to the establishment of linking, the possible costs are not likely to be considered to be major problems. The next section describes some of the conditions that will enhance the probability of establishing, as well as continuing, linkages.

Conditions that Facilitate Linkage

Linkage has the greatest probability of success when the environment is favorable to both agencies. Starr, et al. (1980) list what they found from the literature to be the basic necessity for establishing inter-organizational relations that are satisfactory to the respective agencies. These include: (a) basis for exchange; (b) mutual benefit; (c) awareness; (d) mutual respect, confidence, and trust; (e) access; (f) communication; (g) similarity of attributes, goals and values; (h) opportunity; and (i) incentive.

Basis for exchange. The question here is, "Does each agency have something to contribute in an exchange?" It was noted in the definition of linkage, i.e., if there are no exchangeable items, linkage by definition cannot occur. It is assumed that what is offered by one agency is of interest to the agency with which linkage is to be formed.



Mutual benefit. If linkage is to be successful, both agencies must benefit. These benefits must also outweigh the costs. In a sense, the involved agencies must do a cost analysis to determine if the items that are being exchanged and other non-tangible costs, e.g., loss of some autonomy is worth what is being gained.

The initial discussions in the establishment of linkages should provide the information necessary to make the assessment of benefits to each agency. To avoid this issue would only delay a sense of commitment to the linkage as the result of reservations held by the actors.

Awareness. Knowledge of one's own agency as well as the one with whom linkages are to be formed is necessary, if the maximum benefits are to be obtained from activity. That is, in order to assess the potential benefits that may be derived from linking with an agency, the functions of the agency as well as inputs into these functions must be understood if a systematic analysis is to be made of potential benefits. In addition, an understanding of the capability and administrative structure will facilitate the linkage process. Finally, it is important to understand the domain and philosophy of the agency. Knowledge of the domain and philosophy will allow for a determination of the points at which linkage can be made with a minimum threat to the autonomy of the agencies. In addition, if one understands what the agency personnel perceive as their domain, then encroachment on sacred turf is less likely to happen. Knowledge of the philosophy of the agency will allow the actors to understand "from whence the other cometh." In a sense, this is learning to communicate in the other's language, as well as developing an understanding and acceptance of the agency personnel beliefs.



Mutual respect, confidence, and trust. Knowledge of the other agency is essential to the development of trust. Coupled with acceptance of the characteristics of the other agency, it will lead to the confidence that what is said or done will result in a positive response. If, however, the actors argue on points of philosophy or are still attempting to reach a consensus on agency domains, then it is unlikely that trust will develop.

At the outset of a linkage agreement, it is unlikely that most vocational educators will agree with the apprenticeship representative who says that "training doesn't begin until the work begins." However, when the apprenticeship philosophy is understood, this statement is not as incompatible with vocational education philosophy as it would appear. Few vocational educators would expect their graduates to enter a job without some on-the-job training conducted by the employer.

Thus, until the philosophy of the linking agencies is understood by those involved in the linkage process, there are likely to be arguments about specific points of philosophy.

Access. Accessing an agency requires both physically getting to its location and getting to communicate with someone who is an appropriate contact for the specific purpose. Personnel who are assigned specific work tasks that do not include meeting with external agency representatives are not likely to take their time to consult with visiting external agency personnel.

The absence of personnel who have the authority to discuss linkage possibilities may be by design, oversight, or lack of previous need.

If it is by design, then a conscious decision has been made to establish



a policy to make it difficult to access the agency. Those agencies for which there has been an oversight or no previous need may respond to suggestions to identify such contact persons.

If a formal linkage arrangement is established, then agency contact personnel should be identified. The work assignment of these personnel should include interaction with persons in the linking agency. However, if limiting access is the agency's policy, it will still be difficult to establish effective communication.

Communication. The nature of linkage requires an increase in the amount of communication required between agencies as well as among the actors within an agency. This communication can be of a face-to-face, telephone, or various forms of written communication. The purpose of this additional communication within the agency is to keep the actors who are involved with the external agency abreast of the decisions concerning the linkage activities and progress that is being made on the linkage activities. Communication between the agencies is a must if linkage is to yield any benefits. In fact, the absence of communication will result in the stagnation of the linkage activity. Thus, the communication involved is that which is necessary to coordinate the actors in the conduct of the linkage activity.

Similarity of Attitudes of Goals and Values. There is no general agreement on the extent to which attitudes and goals must be similar in order for linkages to function efficiently. However, agencies working within the same general area and toward achieving similar purposes tend to have similar goals. It would appear that vicational education and apprenticeship fit these criteria, the general area being: providing



workers or potential workers with occupational skills. The problem, however, is that of attitude, i.e., each agency does not necessarily agree with the method by which the skills are learned.

If a linkage is to work between vocational education and apprentice—ship, there must be an acceptance of the other's domain, i.e., domain consensus, and a respect for, or at least an understanding of, the product produced. This does not mean that apprenticeship personnel must accept vocational graduates as completely trained workers or that vocational educators must accept apprenticeship as the only method of training.

Rather, the respective agency personnel would simply need to recognize and accept the method of training that the other provides as useful to the participants.

What is necessary for a linkage arrangement to be effective is for the agencies to have a common goal for the linking activity and a positive attitude toward the possibility of achieving the desired benefits. If this can be achieved, it is likely that the roles of vocational education and apprenticeship can be considered to be complimentary, i.e., vocational education providing some level of skill training and apprenticeship continuing this training up to the journeyman level.

Opportunity. Opportunities are usually created by someone or something; the scarcity of resources or a legislative mandate for example. These opportunities for linkage then can be defined as conditions within the environment that cause one agency to contact another to seek out the possibility of developing a coordinated effort. If there is to be an opportunity, someone within the agency must make an effort to create it. The incentive to make the effort is another necessary ingredient to the development of linkages.



Incentives. An incentive must be strong enough to result in an effort to create the opportunity for linkage. Thus, the reward or pay off must be meaningful enough to the actors to cause them to make changes in their usual mode of operation. Such incentives may result from the desire to meet a legislative requirement on the conviction that a desired goal of the agency is sufficiently important to create new linkages in order to accomplish them. The incentive of complying with a mandate frequently results in weak linkage. A commitment to the value of the linkage is also required. Since there is no mandate for vocational education and apprenticeship to form linkages, any linkages that are formed will most likely be the result of a high level of incentive.

Establishing Linkage Arrangements

This section of the manual is a description of "how to" establish linkages that have a high probability of being successful. Environments in which linkages may be attempted vary tremendously. Thus, what is offered here are guidelines that will help linkage actors avoid some of the pitfalls that the unwary may find to be insurmountable barriers to linkage. While it is possible for the agency representative to establish a workable relationship between his/her agency and another agency without any advanced preparation and prove the adage of "fools rush in where angels fear to tread", it is more likely that the person rushing in without adequate preparation will be rebuffed and pull back at the first sign of conflict.

It is important to note that conflicts are to be expected. In fact Banathy and Duwe (1978) indicate that conflict may be very helpful in establishing linkages. If agency representatives and/or those helping



to facilitate linkage are sensitive to the underlying motivation of the condict, then conflict can be turned into a dynamic tool for establishing domain consensus. Consider for a moment a passive actor who harbors the attitude that if I just go sit and listen to the proposals of linkage and then find reasons why linkage is not beneficial to my agency—a sort of "this, too, shall pass" attitude. It is easy to see that persons who are at least willing to talk about differences are much more likely to overcome the barriers to linkage than are those who have as their agenda to see that attempts to linkage fail.

The major steps to establish linkage are:

- Conduct prelinkage activities for the purpose of establishing the need for a commitment to considering the possibility of conducting linkage activity.
- Develop a linkage plan to accomplish specified goals for the linkage activity that, in turn, will accomplish goals of the respective agencies. Plans thus developed should be evaluated by each agency to determine the cost effectiveness of the linkage activity.
- Conduct the linkage activities as per the plan or an improved plan that results from mid-course corrections agreed upon by the agencies.
- Evaluate the linkage activity to determine the extent to which the goals of the activity and agencies were met. Spinoff effects that result from the conduct of the activity should also be observed and recorded.
- Formulate an agreement and structure for continued conduct of linkage activities.



It may be noted that the steps appear not to allow for changing one's mind about participating after linkage has begun. It should be clear in the detailed description of these steps that follows that the participating agencies may decide at any point that participation is not productive and should thus be discontinued. In some cases, it would be desirable to complete activities that have begun--especially if the other agency is depending on its completion to meet some specific goals. The point here, however, is that linkage is not irreversible, i.e., the decision to discontinue linkage may be made by either of the involved agencies. A plan for wind down would provide the most expedient transition if the linkages are complex. Perhaps it would be better to discuss getting linkages established before discussing how to close them out.

Who to Involve. It is obvious that one agency or persons within the agency must have the incentive to start an inquiry into a possible linkage. To be effective, the actors who should be involved in the planning of linkage activities are those who will be directly involved in the activity and those who can make decisions and make commitments of the resources to be exchanged. In addition, the linking agencies may wish to involve a linkage facilitator who is not a member of either agency's staff. As the title suggests this person should facilitate the development and management of the linkage activities. Thus, a person who has skills in analyzing organizations, providing assistance in designing linkage by providing a structure within which the linkage can be designed, and facilitating the implementation of the linkage is needed for this role.



Each of the linking agencies will also want to appoint a linkage coordinator for overseeing the agency's responsibility for the conduct of the linkage and for accomplishing the linkage activities. The linkage coordinator should have the authority to make most routine decisions concerning the day-to-day activities involved in carrying out the linkage plan and have a direct line of communication to the authority that can make more major decisions.

An important function of the linkage coordinators is to give the other agency someone to contact. This provides for the access to, and communication with, the agency. The linkage coordinators can channel information to the appropriate location within his/her respective agency. Another reason for having the linkage coordinator is to be sure that someone is responsible for the completion of tasks. It is well known that everyone's task is no one's.

The list of persons who should be involved in the initial meetings to discuss linkages will depend on the particular context in which the linkage will be formed. However, it is likely that part or all of the following persons would be involved.

Apprenticeship Personnel

Bureau of Apprenticeship personnel

Workers (journeymen) in area for which linkages are being formed

Management personnel

Union representatives

Vocational Education Personnel

Vocational director(s)

School administrators



Occupational Specialists

Vocational Instructors and Department Heads

Guidance Counselors

State/Regional Vocational Education Consultant

Third Party

Linkage Facilitator

Making Initial Contacts. The initial contacts will most likely be made by the agency that perceives that there are benefits to be derived from linking or a linkage facilitator that has been employed by the agency. These contacts will likely be a one-to-one contact either face to face or by telophone.

Before making any contacts it is advisable for the agency person or linkage facilitator to study both agencies in detail. This would include a careful examination of the legislation forming the agencies, activities they conduct as well as the policies and administrative structure of each agency. It is very important to make the initial contacts with the appropriate personnel. Failure to contact the appropriate personnel may result in sudden death of linkage proposals. In addition, the person making these initial contacts should carefully consider the possible benefits and costs of proposed linkage. Almost without fail, the person(s) contacted will have questions about the costs and benefits of such an arrangement.

The person making these contacts should present a clear description of linkage and explain the utility of the meeting to discuss the potential of the proposed linkage. In addition, the person should be sensitive to the perceptions of the persons being contacted. The end goal of the



initial contacts is to obtain commitment to meet to discuss possible linkages. Thus, the person contacting agency members should be sensitive to possible barriers to linkage and be adaptable in his/her approach.

In short, the person doing the initial contact has the task of creating the opportunity for the beginning of discussion about linkage and developing the incentive to make the effort required. This incentive should result in administrative approval to investigate the feasibility of forming the proposed linkage.

Conducting a Preliminary Meeting. The purpose of conducting prelinkage meetings is to determine the context of the purpose of linkage, the utility of linkage, obtain domain consensus, identify barriers to the proposed linkage, investigate possible facilitators to overcome the identified barriers, determine factors that motivate participants, identify functions of agencies, and establish the goals for the linkage activities.

Context of proposed linkage. Before groups can begin to talk to each other they need to know both who they are themselves and who the other agency is. It was noted in the "conditions that facilitate linkage" section that becoming aware of one's own as well as the agency with whom linkages are proposed is necessary before the maximum benefits can be obtained from the linkage.

A procedure that will facilitate this awareness is for each agency to agree on what it considers its domain and philosophy to be. In brief, this means to write down what is done, the scope that it considers its operations to include, and the philosophy with which it approaches what it does. Such a document should be prepared before the first meeting and



exchanged prior to the meeting. This will allow the first participating agency to consider what it is they do and need; and, what the second participating agency feels it does before coming together to discuss the possibility of linkage. With an understanding of each other's agency, the participants should be more sensitive to the statements in meetings and thus react less to points of philosophy with which they may disagree. An attitude of understanding and acceptance is desired rather than one of hostility. Such an attitude should allow the development of a consensus on domain.

Domain consensus can be facilitated by developing a laundry list of what each agency does, where each function is done, and which group of clients is served. A form such as the one included as Appendix 1 can be utilized for this activity. The differences and similarities can then be identified. There is no need to try to assign each function to only one agency. Rather, the point is to develop a consensus of what is being done. This activity will result in a more detailed awareness of the functions of the agencies and to possible linkage activities.

Determine rotential linkage activities. A suggested activity could be to have each participant write down what his/her agency could do that would benefit the other agency. Participants should be encouraged to disregard the potential cost or benefit to their own agency while developing this list. Costs and benefits as well as the acceptability of the other agency accepting the assistance should be taken up after the composite list is generated.

The lists thus developed could be placed on newsprint and hung on the wall so that all participants could read and consider each as a



possible linkage activity (Appendix 2). This will enable the facilitator to enlist the assistance of the participants to determine which of the identified possibilities of assistance would be acceptable to them. That is, which of the items could the other agency do for your agency, that you would not consider to be an infringement on your "turf."

This activity has the potential of creating conflict and thus the facilitator will need to reemphasize the point that this is a process that should result in a consensus of which linkage activities will be undertaken and that none will be considered without the consensus of both agencies involved.

The list that remains after being purged of those things that are unacceptable can be utilized in a preliminary cost-benefit analysis. Prior to conducting the cost-benefit analysis, however, it would be good to ask the participants in each agency to list activities that they would like the other agency to do for them. These additional items could be added to the purged list. It may not be possible to conduct a complete fiscal cost/benefit analysis, but the softer side of what the costs and benefits would be is more likely to be possible. By softer side it is meant costs other than monetary. It will probably also be possible to get a rough estimate of the monetary costs. These rough calculations can be checked more thoroughly prior to finalizing a linkage plan.

The result of this process is a list of activities which could be included in a linkage plan. There are several items to consider before the developing of the plan, however. For example, there may be some particularly large barriers that exist or are perceived as existing that should be brought out in the open for discussion. Very often when



barriers are discussed participants will be able to identify facilitators to assist in overcoming the identified barriers. Thus, discussing the barriers prior to deciding on linkage activities will avoid the problem of not including some areas that have barriers that can be overcome easily and including others that have barriers that would take a considerable effort to overcome.

Identifying barriers and facilitators. Barriers are the things that keep agencies from doing things cooperatively. They can be both perceived and actual. The perceived barrier can be as much a problem as the actual, if the perception of the barrier is not changed. The activity described in this subsection is one which should separate the perceived from the actual. By eliminating those that are only perceived we can reduce the work considerably. If, because of inadequate communication, the vocational educator believes that his/her students are given inadequate consideration for apprenticeship openings and the apprenticeship personnel describe their procedures for selection, a barrier for placing vocational students in apprenticeship positions may be eliminated.

The reasons why something "can't" be done or the things that are raised as objections to doing something are barriers to the conduct of the activity. For example, if there are too few apprentices in a trade for the vocational school to offer instruction on the theoretical aspects of the occupation, does this mean that the area of linkage is not possible—must the trade or employer offer a class in such cases? Or could an individualized course of study be approved by the apprenticeship committee and be taught by the vocational instructor. Although this may bend some rules in both agencies, it would result in instruction being



provided that might otherwise be very difficult to provide where only a few apprentices in a given trade need such instruction.

In the above example, the barrier is insufficient numbers of students to offer a standard classroom instruction program and the facilitator is individualized instruction. The barrier in the earlier example on the admission of vocational students to apprenticeships was communication, while the facilitator was open communication to resolve misconceptions.

Continuing cross communication can be obtained by each agency having someone holding membership on committees for the other agency. An apprenticeship sponsor could serve on the advisory committee for the vocational education program and a vocational educator could hold membership on an apprenticeship committee. Thus, it can be seen that a facilitator is something that helps to overcome an identified barrier. The form in Appendix 3 should be of assistance in identifying possible barriers, separating the perceived barriers from real ones, and indentifying possible facilitators that will help alleviate the barriers.

The list of barriers can be developed by having each participant write down what the barriers to linkage are for each linkage activity.

A composite list can be developed and reviewed by all participants. This avoids the problem of having to express something negative orally—especially for those who are somewhat reserved. The list thus compiled should be reviewed and discussed by the total group. This will allow for an exchange which should eliminate many of the perceived barriers—at least those that are perceived as being provided by the other agency. The rule, however, is "when in doubt—leave it in." It is better to leave possible perceived barriers on the list than to dismiss them as not creating any problem.



This purged list of barriers can be used to list possible facilitators that will assist in overcoming the identified barriers. The suggestion of possible facilitators should not create hostile feelings and thus could be done either in an open discussion or by writing them down. Sometimes if individuals are required to write they will be more likely to think.

The barriers and facilitators should provide the personnel who are conducting the linkage activities with forewarning of possible problems and the means with which to avoid or deal with them.

Determine motivating factors. As the facilitator observed the participants he/she will most likely observe factors emerging that motivate the participants. These factors should be noted so that the linkage plan can be developed to maximize these factors. If sponsors are motivated by having prescreened applicants then this should be included in plans that involve facilitating the placement of vocational students, i.e., the plan would call for only those vocational students who have been prescreened to be recommended to the employer for apprentice-ship openings.

The alertness of the facilitator will determine the extent to which motivating factors can be identified. The alert facilitator can also sense those factors that are sensitive to the participants and guide the group so that these factors are minimized. A sheet such as the one contained in Appendix 4 will remind the facilitator to write these items down as they emerge.

Selecting linkage activities. As noted earlier the number of activities that are selected to be included in the linkage plan is dependent on the



potential cost and benefits to the respective agencies. The process described here is one that calls for a mutual agreement between the two agencies concerning the number and scope of activities. All activities may be of the low involvement type such as the providing of instruction in a vocational classroom by an apprenticeship instructor or the activities may range from low to high involvement. High involvement activities are those that require considerable coordination and thus communication by personnel from both agencies.

The levels of linkage involvement from low to high can be classified as: (a) exchange of information, (b) administrative contract for services, (c) coordinated activities that result in increased ability to achieve goals, and (d) coordinated activities to integrate some agency functions which result in a dependency of each agency on the other to meet their respective goals. A discussion of these levels follows.

The exchange of information level of linkage includes those activities that are conducted to keep the respective agencies abreast of what the agency is and what it is doing. A plan that reflects this level of linkage would include only activities that are designed to improve communication. Communication can be facilitated by a number of methods including the exchange of announcements, participation on advisory committees of the other agency, joint use of facilities, and annual (or more frequent) joint workshops or conferences.

At the administrative contract for services level, as the name implies, it is assumed that one agency has the money and the other has the ability to deliver the services. The primary area in which this type of linkage would occur is instruction. However, the unique situation



that is involved with vocational education and apprenticeship is that apprenticeship has the students which are available to be taught--provided that vocational education hires an approved instructor. The importance of the availability of students in this exchange is that the source of funds for vocational education is the generation of instructional credit.

It should be noted that this level of linkage is not necessarily more involved nor has greater benefits than does the exchange of information level. In fact, the administrative contract for services level can exist without a great deal of communication. However, the next two levels to be discussed would not operate effectively without a fairly high level of communication.

The coordination of activities that result in increased ability to achieve goals involves those joint activities that are planned and conducted by members of both agencies. The activities are selected or designed such that each agency's objectives are met at a higher level without creating a dependence on the other agency. This means that the agency does not stop doing what it is currently doing to meet its objectives, but, rather, adds another mechanism to meet the objective via the linkage activity. The example of the vocational education person assisting to develop apprenticeship given earlier is appropriate here. At this level of linkage the apprenticeship personnel would not stop their activities in developing apprenticeship opportunities.

Dependence on the part of one agency for another agency to corduct an activity is created by a linkage arrangement that involves integration of the agencys' functions. At this level of linkage, one agency could conduct activities that are necessary to meet the other agency's objectives.



In the above example, this would involve the Bureau of Apprenticeship stopping their efforts in developing new apprenticeship opportunities.

The linkage activites selected provide the basis for the linkage plan. The next section provides a suggested structure for developing linkage plans. The structure is only suggested and may be modified co meet the agencies' needs.

Before starting to plan the activities it may be well to review what has been identified as the activities that are to be included in the linkage plan. If each of the agency personnel perceives that the activities to be accomplished in the linkage arrangement are those that should be conducted, then the linkage group is ready to begin planning. However, if there is doubt on the part of any of the participants, there should be further discussion about the nature and purpose of the activities about which doubt is expressed. It could be that some activities must be held back until the first round of activities are completed. After the first cycle of the linkage arrangement, the participants will build trust that will enable them to conduct future activities that require a higher level of dependence. The level of linkage that involves some dependence may only be achieved after activities are conducted that assist the agencies to achieve their goals at a higher level than would have been possible without the linkage. For example, the Bureau of Apprenticeship may have as its goal the providing of related technical instruction, and vocational education may agree to deliver this instruction. This doesn't necessarily mean that the BAT reduces its efforts to teach the occupation to the apprentices. In future years the activity may be so successful that BAT can turn its efforts toward other goals.



Having made one last check to see that all participants agree on the planned activities, the planning for the conduct of the activities should begin.

Developing a Linkage Plan

A linkage plan is a set of linkage activites for which strategies for conduct are specified. This section is a discussion of the process of determining which strategies are best in a particular situation.

Before launching into a discourse on planning strategies, a few reminders may be of assistance. First, linkage of agencies is an arrangement designed to utilize the resources of both agencies to accomplish specific goals for the linkage activities as well as goals that each agency has. Thus, in designing plans it is important to remember these requirements, that is, an exchange is two sided--both must give as well as receive. The sharing of resources, for example, staff time, should reflect the agency's ability to give of the particular resource. In addition, the person or unit within the agency that is to provide the resources must be able to accomplish the linkage tasks assigned. For example, the person who agrees to (or is assigned to) conduct linkage activities must have the time in his/her work load for these additional tasks. It is possible that the linkage activity can simply be a different way of doing something, e.g., the vocational instructor who would normally place his/her students in industry at the end of training, may only need to sell the industry on creating apprenticeship opportunities for which the graduates could be applicants. Assuming that the vocational students have a degree of success in obtaining these apprenticeship positions, the instructor has



accomplished his/her goal of placing graduates in the field for which they received vocational training.

Attention should be given to seeing that some equity exists in the balance of tangible as well as intangible resources shared. Overall, the resources shared should be reasonably well balanced.

Secondly, the linkage belongs to the agencies involved. The linkage facilitator does not own the activities nor should he/she indicate which tasks are to be done or how they should be done. Rather, the facilitator is to assist the linking agencies to arrive at a pian for linkage that will work for the agencies. When this is done, the facilitator's role should be further and further in the background. By the end of the first cycle of linkage activites, the facilitator should no longer be needed, i.e., the agency personnel should be able to assume all leadership for the continuation of linkage.

There are several rather basic questions that must be answered when developing strategies for linkage plans. These include: (a) What are the goals for the linkage? (b) What tasks are required to complete the activities? (c) Who will do them? (d) When must the tasks be done?

In the previous section the process of selecting the activities was discussed. The next section provides a strategy of how a group might go about developing a plan for the conduct of the identified activities.

Establishing goals. At the outset, the goals for the linkage arrangement should be established by the participants. In fact, the participants from each agency should establish the goals that their agency has for the conduct of the activity and the participants as a group should establish the goals for the linkage arrangement. In establishing the goals for the agency, the questions that representatives



of the agency should ask is "What should the linkage arrangement do for this agency?" A list of the desired outcomes become the set of goals for the supportive agency which should be well understood by both of the agencies involved. That is, there should not be a secret agenda. In addition to the two sets of agency goals, a set of goals for the linkage activities should also be developed. This set of goals should reflect the outcome of the linkage arrangement from the perspective of the total group.

It may be noted that the goals established by the agencies are part of a larger set of goals, while the goals established for the linkage arrangement are not. Rather the goals for the linkage arrangement represent the outcomes of the linkage without reference to any other referrent. This simply means that when the participants have achieved the goals established for the linkage arrangement, that the activities have been completed successfully. On the other hand, if an agency has as a goal for the linkage arrangement the establishment of good public relations, it may not be possible to know that the goal has been met.

Tasking the activities. The breaking of large tasks down into subtasks, frequently referred to as tasking, is a useful way to clarify what is to be done. If more detail is required, each of the subtasks can be further broken down. When the "chunks" of work that are defined by the breakdown are manageable, then the appropriate level of subtasks have been developed. The appropriate level would seem to be that which defines a unit of work that can be assigned to one of the linkage team members. A form is provided in Appendix 5 that may help in the tasking



of activities. The procedures for developing a breakout of an activity is simply to ask what are the things that must be done in order to accomplish this task. Then if each of these subtasks is too large to assign or more clarity is needed as to what is to be done, each subtask can be broken down by asking what must be done to get this subtask done.

In the example of a linkage activity of identifying new apprenticeship opportunities, a breakout might be as follows:

Activity: Identify new apprenticeship opportunities

- 1.0 Develop a list of companies that employ persons for this occupation.
 - 1.1 Optain list from local labor union
 - 1.2 Obtain list from chamber of commerce
 - 1.3 Merge the lists
- 2.0 Develop sales pitch for contacting the identified companies.
 - 2.1 Define the apprenticeship concept
 - 2.2 List the benefits of apprenticeship
 - 2.3 Write sample statements (sales pitch) chat incorporate the benefits
 - 2.4 Practice the sales pitch on a friend or fellow worker
- 3.0 Contact companies for appointments.
 - 3.1 Develop calling list
 - 3.2 Contact personnel officer to determine company protocol
 - 3.3 Make appointments with appropriate personnel



- 4.0 Meet with company representatives to sell them on the apprenticeship system.
 - 4.1 Explain the apprenticeship concept
 - 4.2 Discuss informally the benefits of creating apprenticeship opportunities
 - 4.3 Determine the procedures for company decision making on such personnel matters
 - 4.4 Schedule time to check back to determine status of decision
- 5.0 Register the apprenticeship opportunity.

It may seem unnecessary to provide this much detail for an activity. However, once this detailing is complete the assignment of tasks to linkage participants is much easier. In addition, it may be very clear who the logical person is to do the subtasks. In the above example, someone may have already developed a list of all the companies that hire workers in a particular skill trade within the region being served. This would eliminate the need for doing a time consuming task.

Assigning linkage tasks. The assignment of responsibility for doing the tasks (subtasks) required to conduct a linkage activity can often be accomplished by the acceptance of responsibility by the linkage participants. That is, the participants may be willing to complete one or more tasks or see that someone within their agency completes the tasks. In addition, by virtue of position, many of the tasks will fall to specific personnel. In the latter case, the linking agencies must be willing to provide time within the person's work load to complete the assigned duties. Some hard decisions will have to be made for those responsibilities not accepted by the participants. If the agencies are



serious about the linkage activity, the decision makers must be ready to assign staff and resources to the activities.

When the responsibility for conducting all of the subtasks is completed, a check should be made to determine the extent to which the responsibilities are spread as evenly as possible. If some participants or one agency is overloaded, a redistribution may be required. However, a complete balance between agencies or personnel may not be desirable for a single activity. Other participants and the opposite agency may have greater responsibility for other activities included in the linkage plan. Thus, the balance of effort and resources may be left until all linkage activities are completed. In fact, the personnel in one agency may complete most of the activities in one activity while another activity may be done mostly by the other agency. The form in Appendix 6 may be helpful in listing who has accepted or been assigned each particular subtask.

Setting milestones and deadlines. Specifying a time by which to have each subtask of an activity accomplished will nearly always improve the rate at which the activities are completed. In order to increase the chances of completing tasks on time, it is a good practice to set up some check points or milestones that can give those doing the tasks some idea of how well they are doing in meeting the prescribed schedule. In the example of the identification of new apprenticeship opportunities we could set up the following schedule:

Milestone	<u>Task</u>
Month 2	Complete the list of companies that employ persons for this occupation
Month 3	Complete the sales pitch for contacting identified companies



Milestone	Task
Month 4	Contact and meet with representatives of ten companies
Month 5	Contact and meet with representatives from 30 companies
Month 7	Complete contact of identified companies
Month 8	Complete telephone follow-up of all companies
Month 10	Complete registration of apprenticeship opportunities

Reporting of the progress made at regular linkage meetings should provide the incentive necessary to encourage the participants to progress on schedule. If, however, it is found that some of the linkage actors are slow to perform, it may be necessary to assign others to provide assistance. Frequently, when assignments are accepted, the person accepting them does not have clearly in mind the extent of the activity nor his/her own work load. Thus, "mid-course corrections" become necessary. The form in Appendix 6, in addition to providing who is to do the tasks, also provides space for the anticipated completion date. In some cases, such as the contact of companies in the above example, it may be necessary to set up intermediate checkpoints specifying how many companies have been contacted. At linkage meetings it is also a good idea to report outcomes of the activity, e.g., 15 new apprenticeship opportunities have been identified and registered in building trades.

The milestones should be developed by the group with specific input from those who will be doing the activity. It is much more acceptable to establish one's own deadline than to have one imposed. The next



section is a discussion of the implementation of the linkage activities that have been planned.

Implementing Linkage Plans

Up to this point, the process of developing and planning linkage has been discussed. Thus, the goal has been to develop a linkage agreement. The implementation of the plan requires that the goal of the actors change from development to implementation. This change may result in a lessening of effort because of the feeling that the work has been completed. Contrary to this feeling, the fact is that the work has just begun. This section is an attempt to provide assistance to avoid stagnation in the linkage while fostering positive working relationships. Items to be discussed are: 1) developing communication channels, 2) beginning linkage activities, 3) reporting progress, and 4) mid-course corrections.

Developing communication channels. Successful linkage is dependent on adequate communication. It is important to know with whom to communicate and to be able to contact the appropriate persons without "going through channels." So much time may elapse while going through channels that the reason for the communication may no longer exist. In addition, the longer the communication channel is, the greater the possibility of distortion. The best communication to keep linkage activities on track is oral communication among those involved, whether face to face or via telephone. In order to insure that communication is productive, communication must occur with relative frequency; it is a good idea to set up regular meetings for all linkage participants as well as for those involved in a particular linkage activity.



Meetings of linkage participants. The group that met to develop the linkage plan should continue to meet on a regular basis to monitor the progress of the completion of the plans that were established. These meetings will not only provide for continued interaction but also increase the trust among the actors. In addition, by keeping abreast of the progress being made, the group will be better able to plan for new linkage activities and to evaluate the utility of recycling of the ones that are on~going. As ideas for new activities emerge during the first year, it is likely that a sub-group or task force will be able to develop preliminary plans for the activity and then present the preliminary plans for the new idea for consideration to the total group. This should allow for efficiency of communication while fostering the cooperative relationship. It is important to keep records of the transactions that are conducted in all group meetings. Thus minutes should be taken and distributed promptly. This will provide the participants with a record of the progress, agreements, and changes made. It will also allow for the correction of misunderstandings that may go unresolved. That is, if the participants do not agree with the minutes that are issued by the group's secretary (i.e., keeper of the minutes), they can voice their disagreement at the next meeting.

Meetings of the sub-groups on communication. Members of sub-groups which are charged with the responsibility of conducting specific linkage tasks will need to communicate frequently. It is suggested that an atmosphere be developed whereby all those in such a sub-group feel free to telephone any other member as the need arises. The bureaucratic protocol where sheriffs only talk to sheriffs and deputies only talk to deputies is dysfunction. It is likely that there will be different



levels of staff members for the two agencies working on a linkage activity. Direct communication among the members of the subgroup regardless of "rank" is seen as desirable.

In addition to informal communication among the members, it is anticipated that the subgroups charged with the conduct of one or more activities will also meet on a regular basis. A frequency of the meetings should be gauged by the upcoming activities; an estimation of when enough should be done on specific tasks to merit a report of progress. The purpose of this communication is to facilitate the completion of the linkage activity, and to prepare to report the progress to the less frequent meetings of all linkage participants.

Records of the meetings of subgroups are as important or more important than the larger group meetings. In addition to serving the purpose described for the total group, the minutes of the subgroup meetings will assist all participants to keep up with the activities being conducted. This enables all participants to convey their thoughts on how to most effectively conduct the activities. However, perhaps the most important function is to let everyone know what everyone else is doing to avoid the problem of some claiming that "no one told them." Thus the maximum amount of trust should result.

Reporting progress. As was noted in the section regarding the establishment of communication, the provision for regular reporting of progress is important for the maintenance of momentum in the conduct of the linkage activities. Reporting will provide an informal method for the linkage participants to monitor the extent to which the plans that were developed are being followed. Meetings should be scheduled as frequently as required to make decisions to facilitate the completion of activities. The subgroups may need to meet more frequently when



the activities being conducted require extensive coordination. The minimum number of meetings is the number that are required to keep the communication channels open, provide the formative evaluation, and make the corrections in plans that become necessary as the activities progress. The need for mid-course corrections are likely to be indicated as the result of regular reporting.

Mid-course corrections. Plans are made with the use of less than adequate data and, as yet, no one has figured out how to foresee the future. Thus, the best laid plans will usually require some changes before the planned activity is completed. When such needed mid-course corrections are not identified and made, the activity may stagnate and be difficult to get moving again.

Factors that create the need for mid-course corrections include,

(1) inadequate time available for the activity by the person(s) assigned to do it, (2) lack of knowledge of how to do the activity, (3) lack of commitment, (4) lack of cooperation from others involved, and (5) lack of confidence in one's ability to do the activity. Regardless of the reason for not making progress, its cause and the solution can be worked out in a group meeting. However, those responsible for activities may try to save face by covering up their lack of progress. The linkage facilitator, as well as the linkage coordinators, should be sensitive to reports of progress that do not include substance. That is, reports that do not include sufficient indication of concrete progress should be followed up either in the meeting or on an individual basis.

Many of the identified problems will be resolved by group process either by the person responsible for the conduct of the activity solving the problem by his/her attempt to explain it, by the suggestions offered by other members of the linkage team, or by an offer of assistance.



When problems are not resolved by this process, it may be necessary for the linkage coordinator to investigate the problem and make changes in the strategy for completing the activity. The linkage facilitator may serve as a resource person where the solution is not readily apparent. The linkage facilitator should act only in an advisory capacity, however, the decision must be made by the appropriate agency personnel.

It is important for the participants in the linkage process to feel successful. Thus those who are having difficulty should be helped to succeed—not be made to feel that they are failures. However, those who are not making progress should be made aware that the completion of the linkage's activities is important and that others are concerned and willing to assist when assistance is needed. Whatever the mid-course correction, whether it be an addition of personnel assigned to a task, the changing of the person responsible or just giving moral support, it should be made in a way that conveys concern for both the linkage activity and the linkage participants.

Evaluation of Linkage

The two purposes for which evaluation should be done are (1) to determine how well the process of linkage is being conducted so that improvements in the linkage strategy can be made as it progresses, and (2) to determine how well the linkage strategy worked before recycling the activity. These two purposes have been given the labels of formative and summative, respectively. The labels are not really important but are useful in distinguishing between evaluation that is conducted while there is still time to make changes in the way the linkage activities are being conducted (formative), and evaluation which is



conducted to provide information as to how the linkage activity can be improved the next time it is done (summative).

The progress reports and group process will provide much of the necessary information concerning how well the linkage activity is being conducted. In addition, the emergency calls from the linkage participants to the linkage coordinators and facilitators will provide additional information. The mid-course corrections discussed earlier represent the changes that result from formative evaluation. Most of these data and corrections based on the data will be accomplished routinely. However, when a problem persists, it may be a good idea to form what might be considered a troubleshooting team to investigate the problem and to suggest or prescribe solutions. Such a group would likely include the linkage coordinators and the linkage facilitator. This "troubleshooting" group should be viewed as providing assistance rather than performing an evaluation, however. This will assist in reducing anxiety, rather than increasing it.

The collection of some information will be more structured and formal than the listening to progress reports and fielding emergency calls. Some situations call for the collection of data using a question-naire, survey, or telephone interview. For example, a survey of the industry personnel that have been contacted by linkage participants to solicit their input as to the factors that contributed to their agreement to create a position for an apprentice, as well as to determine which factors contributed to the decision made against creating such a position if they did not. This would enable the linkage coordinators to make specific suggestions as to how the approach could be improved.



Whenever formative data are collected, they should be analyzed as soon as possible and provided in the form of feedback to the involved linkage participants. Failure to provide feedback in a timely manner will result in minimizing the value of the formative data.

Although the specific formative and summative questions will depend on the nature of the linkage activities undertaken, there are some general questions that will be of assistance in determining the nature of the data that should be collected at the various points along the way. Examples of these questions are provided in Table 1.

Table 1
General Formative and Summative Questions

Formative

- Are we minimizing conflict and capitalizing on it when it does occur?
- Are we getting the participation ci key actors?
- Is the linkage facilitator getting participants involved in the prelinkage activity?
- Is the incentive needed for linkage sufficient to encourage linkage?
- Are barriers to and facilitators of linkage being identified?
- Is the domain of each agency being clearly described?
- Are potential linkage activities being identified?
- Are motivating factors being identified?
- Is the process for selecting activities working?

Summative

- Was the net outcome of conflict positive?
- Did key actors participate in prelinkage activities?
- Did the linkage facilitator get sufficient involvement in the prelinkage activities?
- Were adequate incentives developed to encourage participants?
- Were the barriers to linkage identified and used to facilitate linkage?
- Was domain consensus reached?
- Were appropriate linkage activities indentified?
- Were motivating factors identified and used to facilitate linkage?
- Were appropriate linkage activities selected?



Table 1 (Continued) General Formative and Summative Questions

Formative

- Are the linkage activities being clearly defined in do-able chunks?
- Is the process for assigning tasks working?
- Are milestones and deadlines being established?
- Are we successfully making the change from planning for linkage to doing linkage activities?
- Are communication channels being established?
- Are large group meetings producing the desired results?
- Are small group meetings facilitating the conduct of the linkage?
- Are minutes of all meetings being kept and utilized in formative evaluation?
- Are reports of progress adequately reflecting the progress being made toward completion of linkage activities?
- Are formative evaluation data being collected and utilized to facilitate mid-course correction?

Cummative

- Were the linkage activities planned well enough to facilitate the conduct of them?
- Were linkage tasks appropriately assigned?
- Were milestones and deadlines accomplished and met?
- Was the linkage plan implemented?
- Were communication channels functional?
- Did large group meetings produce desired results?
- Were small group meetings utilized effectively in the conduct of linkage activities?
- Were minutes of meetings utilized in formative evaluation?
- Did the reports of progress adequately reflect the progress that was made toward completion of linkage activities?
- Were formative evaluations used effectively?

Recyclis the Linkage Process

Activities included in the linkage arrangement will require differing lengths of time to complete. A cycle can be as short as a month or as long as several years. Thus, activities will be starting up and ending at different points in time.



Table 1 (Continued) General Formative and Summative Questions

Formative

- Are the linkage activities being clearly defined in do-able chunks?
- Is the process for assigning tasks working?
- Are milestones and deadlines being established?
- Are we successfully making the change from planning for linkage to doing linkage activities?
- Are communication channels being established?
- Are large group meetings producing the desired results?
- Are small group meetings facilitating the conduct of the linkage?
- Are minutes of all meetings being kept and utilized in formative evaluation?
- Are reports of progress adequately reflecting the progress being made toward completion of linkage activities?
- Are formative evaluation data being collected and utilized to facilitate mid-course correction?

Summative:

- Were the linkage activities planned well enough to facilitate the conduct of them?
- Were linkage tasks appropriately assigned?
- Were milestones and deadlines accomplished and met?
- Was the linkage plan implemented?
- Were communication channels functional?
- Did large group meetings produce desired results?
- Were small group meetings utilized effectively in the conduct of linkage activities?
- Were minutes of meetings utilized in formative evaluation?
- Did the reports of progress adequately reflect the progress that was made toward completion of linkage activities?
- Were formative evaluations used effectively?

Recycling the Linkage Process

Activities included in the linkage arrangement will require differing lengths of time to complete. A cycle can be as short as a month, or as long as several years. Thus, activities will be starting up and ending at different points in time.



The actors in the linkage process will have learned a considerable amount from the experiences they gained from the first cycle of linkage activities. If, on balance, the activities were considered to be beneficial by both agencies it is likely that a continuation of the linkage activities will be desirable. However, changes that will increase the probability that the activities are conducted should be made.

Changes that have been made as the result of formative evaluation should not be overlooked when planning future activities. If the actors were to simply go back to the original plans they could overlook the changes that were made along the way. The summative evaluation data should also provide input to the activities that should be continued and those that should not. In addition, the summative evaluation data should provide insight as to how the activities that are to be recycled can be improved as well as to suggest additional activities.

However the participants in the linkage process are the most likely sources for suggestions for additional linkage activities and improvements, and the ones that have been conducted that are going to be recycled.

The steps to continuing the linkage as an ongoing function of the involved agencies include planning, implementation of plans, and monitoring progress. These steps are discussed in the following sections.

planning. The process of planning for the recycling of linkage should not be that much different from the original planning. Thus the procedures for the planning process should be reviewed. What is different is that the participants have had some experience with the linkage process and with each other. This experience should allow the



participants to have acquired a degree of trust in the members of the linkage team and to a better understanding of what can be done by forming a linkage. It may be that sufficient trust will have developed to plan linkage activities that are on a higher level of linkage.

The participants in the linkage process, no matter how much they have come to trust one another, should not skip the planning of activities. It may be remembered that the steps in planning are:

- Determining potential linkage activities,
- Identifying barriers and facilitators to the conduct of linkage activities,
- Selecting linkage activities,
- Tasking the activities,
- Assigning linkage tasks, and
- Setting milestones and deadlines.

Failure to recycle the planning process is likely to result in the deterioration of the linkage. Thus the temptation to say that "we've done that already" should be avoided.

Implementation of plans. Implementing linkage plans for the second cycle of linkage between agencies should be easier than the first. Communication channels should have been established for most of the participants and meetings should be an accepted part of the way the job gets done. However, new participants should be initiated into the making of linkage. It would be easy to overlook the new participants, however, as linkage activities change and as new participants are added it is important to re-emphasize the need to communicate. As with planning, the communication channels, both formal in the form of meetings, and informal in the form of face-to-face decisions or



telephone conversations must be kept open if the linkage is to be kept viable. Failure to communicate will result in deterioration of the process. For the most part, the process of implementing plans for a recycle of linkage activities should be the same as for the first cycle.

Monitoring progress. The tension created by starting something new and unknown will most likely create the motivation to closely monitor activities that may affect one's organization. However, the second time around these tensions may tend to disappear. It is, however, just as important to monitor progress for the second (or tenth) recycle as it was for the first. In fact, it may be more important. The agencies, having acquired some trust in each other from previous experiences are likely to place more dependence on the linkage activities and they stand to lose more if the activities are poorly done. Thus the large-group and small-group meetings should be continued. The evaluation of both formative and summative data should also continue.



REFERENCE LIST

- Banathy, B. H., & Duwe, A. A model for the linkage of vocational education at post-secondary private schools and industry, business and labor. A research monograph. San Francisco, CA: Far West Laboratory for Educational Research and Development, 1978. (ERIC ED 183 791)
- Banathy, B. H., Haveman, J. E., Madsen, M., & Duwe, A. Building models for the linkage and coordination of vocational educa-at public and private post-secondary schools, and business, industry, and labor. Final report. San Francisco, CA: Far West Laboratory for Educational Research and Development and Pacific Grove, CA: Intersystems, Inc., 1978. (ERIC ED 183 793)
- Banathy, B. E., Haveman, J. E., Madsen, M., & Oakley, G. A model, case study and implementation guide for the linkage of vocational education programs in public post-secondary institutions and business, industry and labor: A monograph. San Francisco, CA: Far West Laboratory for Educational Research and Development, 1978. (ERIC ED 183 792)
- Esterline, B. H. Coordination: A conceptual model and practical consideration. Paper presented to the Educational Commission of the States' National Seminar on State Capacity Building, Austin, TX, 1976. (ERIC ED 140 460)
- Glover, R. W. Apprenticeship in the United States: Implications for vocational research and development, Occasional Paper No. 66.

 Austin, TX: Center for the Study of Human Resources, The University of Texas at Austin, and Columbus, OH: The Ohio State University, National Center for Research in Vocational Education, 1980. (ERIC ED 189 448)
- Levine, S., & White, P. Exchange as a conceptual framework for the study of interorganizational relations. Administrative Science Quarterly, 1960, 5, 583-601.
- Starr, H., Maurice C., Merz, H., & Zahniser, G. Coordination in vocational education planning-barriers and facilitators.

 Columbus, OH: The National Center for Research in Vocational Education, The Ohio State University, 1980. (ERIC ED 187 927)



Instructions for Agency Description Form

Overview: The purpose of the form included in this appendix is to assist the facilitator and/or linkage coordinators in getting the personnel in the agencies between which a linkage is proposed to identify what the functions of the agency are, where these functions are conducted, for whom the functions provide a service, and why these services are provided. The intent is to enable the participants to better understand themselves as well as the other agency. It is assumed here that an understanding of what one's own agency is and the agency with whom linkage is proposed, will facilitate the identification of possible linkage activities.

<u>Use</u>: The facilitator or linkage coordinator should use this form in prelinkage activities with the proposed participants to identify the agency functions.

Directions: In a group or individual meeting with the proposed participants in one agency, the facilitator should explain the nature of linkage, the purpose of prelinkage activities, and, specifically, the purposes of completing this form. Each of the participants should write down his/her perceptions of what the agency does, where it is done, for whom services are provided, and why the services are provided. The latter item should not be taken lightly. The purpose here is to gain insights into the philosophy of the participants.

The completed forms should be gathered by the facilitator and used to summarize the functions and philosophy of the agency. The draft summary should be provided to the agency personnel to determine accuracy of the facilitator's interpetation.



Similar procedures should be followed by the second agency to develop a summary of its functions. These summaries will be used in the prelinkage activities that follow.



Appendix I

Agency Description

What is Done? Where is it done?
Where is it done?
For whom is it done?

Why is it done?



Instructions for Identifying Potential Areas of Linkage

Overview: This form is to be used as part of the activities in a prelinkage meeting. With the knowledge gained from the summarization of the functions and philosophies of one's own agency, and the review of the summary of the functions and philosophies of the other agency, the participants of a prelinkage meeting should be able to determine what activities their own agency could do for the other agency. This will provide the starting point for the identification of linkage activities.

Use: Part of the agenda for the first prelinkage meeting of the two agencies should be the identification of possible linkage activities. This form should be of assistance in getting these activities listed.

Directions: At the point in the agenda of the first prelinkage meeting that involves personnel from both agencies, this form should be distributed. The participants should be instructed to write all of the activities that their agency could do for or with the other agency without regard to the cost or benefits to their own agency. The participants should be reminded that these are only ideas and that the costs and benefits will be considered later. When each of the participants have written down all of the activities they can think of, the facilitator may then ask all participants to list the activities they listed on newsprint provided. Separate sheets should be provided for each agency.

The newsprint sheets may then be placed on the wall so that all participants can view the potential linkage activities. They can then



maggest additional activities that the other agency could do for them. These can be added to the lists. The process described in the Guide should then be employed to gain consensus on which of the activities will be included in the linkage arrangement. The first step in gaining consensus is so identify the barriers and facilitators for each suggested linkage activity.



Poten	tial	Activ:	itie s	to	be	Included	in	Linkage	Activitie s
Activitie s	perf	formed	which	cc	ould	benefit	the	other	agency.

	, , , , , , , , , , , , , , , , , , ,
Acti	vities
Acci	vities.
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Instructions for Identifying Barriers and Facilitators Form

Overview: Many activities that could be included in a linkage arrangement will have, or will be perceived to have, barriers that prevent them from being done. The purpose here is to air the possible barriers, real or perceived, that may prevent the successful completion of the activity if it were included in a linkage arrangement. This process should aid in the elimination of those barriers that were only perceived and to identify facilitators to overcome the barriers that are real.

<u>Use</u>: This form is to be used to provide a place for each participant to list the possible facilitators to overcome the barriers that remain after purging those barriers considered by the group to be perceived rather than real.

Directions: The participants are asked to write the barriers that may prevent each listed activity from being done in a linkage arrangement. These lists should be collected and shuffled to insure anonymity of the person writing the barrier. Potential barriers can be written on a newsprint sheet to place on the wall to be subjected to discussion as to whether each barrier is real or perceived. During the discussion, some barriers can be eliminated for which a consensus is reached that they are only perceived. Facilitators for overcoming the remaining barriers should be listed. These barriers should be kept in mind when activities are selected for the linkage activity.



Identification of Barriers and Facilitators

Activity	Barriers to Cooperation	Facilitators of Cooperation



Instructions for Form for Listing Motivating Factors

Overview: The facilitator can play a key role in sparking the interest and enthusiasm of the participants in cooperating to get some activities accomplished. To do this, the facilitator should be aware of what motivates as many of the participants as possible. This can be done by observing what "turns each person on." In addition what "turns each person off" should also be noted.

<u>Use</u>: The form provided is to be used by the facilitator to record motivating factors as they are discerned.

Directions: The facilitator should keep this form handy to record motivating factors as they are observed and to spark his/her memory as to what motivates the various participants to become involved as well as to what is likely to reduce their involvement. This will enable the facilitator to get a higher level of participation from the participants.



Motivating Factors

Positive	reacti o ns							
	Factor					Part	icipant	
								_
				<u></u>				
					_			
egative re	actions							
egative re		t o sugges	sted act	ivities				
gative re	actions (t o sugges	sted act	ivities		Partic	ipa n t	
gative re		to sugges	sted act	ivities		Partic	ipant	
gative re		to sugges	sted act	ivities		Partic	ipa n t	
gative re		to sugges	sted act	ivities		Partic	ipant	
gative re		t o sugges	sted act	ivities		Partic	ipant	
gative re		to sugges	sted act	ivities		Partic	ipant	
gative re		to sugges	sted act	ivities		Partic	ipant	
gative re		to sugges	sted act	ivities		Partic	ipant	
gative re		to sugges	sted act	ivities		Partic	ipant	
gative re		to sugges	sted act	ivities		Partic	ipant	



Instructions for Tasking of Activities Form

Overview: Breaking activities down into tasks and tasks down to subtasks is seen as a simple way to define exactly what is to be done. By asking "What must be done to accomplish the activity?" the tasks can be identified. The next level of breakout, the subtasks, can be obtained by asking "What must be done to accomplish each task?" The level of breakout can be continued until the chunks are the appropriate size to be assigned to participants and to serve as "milestones" of progress.

<u>Use</u>: The form is to be used to record the breakout of all activities. It is to be used by the total group of participants or a subgroup responsible for a particular activity.

<u>Directions</u>: A selected participant or the facilitator should record on the form the breakout of each activity as well as each task. This breakout will provide the basis for assignments and monitoring.



Tasking of Activities

Task 1:	
	Subtask 4:
Subtask 2:	Subtask 5:
Subtask 3:	Subtask 6:
Task 2:	
Subtask 1:	Subtask 4:
Subtask 2:	Subtask 5:
Subtask 3:	Subtask 6:
Task 3:	
	Subtask 4:
Subtask 2:	Subtask 5:
Subtask 3:	Subtask 6:
Task 4:	
Subtask 1:	Subtask 4:
Subtask 2:	Subtask 5:
Subtask 3:	Subtask 6:
Task 5:	
	Subtask 4:
Subtask 2:	Subtask 5:
Subtask 3:	Subtask 6:



Instructions for Assigning Linkage Tasks and Determining Completion Duties

Overview: The assignment of responsibilities for the tasks (or subtasks) that must be done to accomplish a linkage activity is a must. The form provided here is simply to record this assignment and to establish a date by which each task should be completed.

Use: The form is to be used by the group that is responsible for getting the activity completed to record the person(s) responsible as well as the expected date of completion.

Directions: Through a participant meeting, the linkage facilitator could record the tasks needed to accomplish the activities, who will be assigned to the task, and a projected completion date for each task. This would provide an opportunity for participants to volunteer to complete tasks which are of particular interest to them. Tasks for which a volunteer is not received must be assigned in an equitable way.



Appendix 6

Assigning Linkage Tasks/ Determining Completion Schedules

Task/ Subtask	Who Is To Be Assigned	Agency Affiliation	Date Task Will Be Completed
			
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